REMARKS

Claims 1-18 have been examined. Claims 6, 8 and 15-18 have been rejected under 35 U.S.C. § 102(b), and claims 1-5, 7 and 9-14 have been rejected under 35 U.S.C. § 103(a).

As a preliminary matter, the Examiner has not acknowledged the drawing corrections submitted with the Amendment of March 3, 2003. Accordingly, Applicant respectfully requests that the Examiner indicate whether such corrections are acceptable in the next Office Action

Rejections under 35 U.S.C. § 102(b)

A. The Examiner has rejected claims 6, 8 and 15 as being anticipated by U.S. Patent 5,690,974 to Miyairi ("Miyairi").

1. Claim 6

Applicant submits that claim 6 is patentable over the cited reference. For example, claim 6 recites that a gate resides at a point where a runner contacts a resin reservoir. Further, the gate does not protrude into the resin reservoir.

Similar to the previous Office Action of October 2, 2002, the Examiner maintains that nozzle tip 5a (Fig. 1) of Miyairi anticipates the claimed gate. However, even assuming *arguendo* that tip 5a is the claimed gate, tip 5a extends or protrudes into reservoir 4, as shown in Figs. 1-4. Therefore, tip 5a fails to teach or suggest the claimed gate.

Further, as stated in col. 4, lines 30-32 of Miyairi, the reservoir 4 is formed on the movable mold half 2 and compression core 6 is arranged on the fixed die half 1. Claim 6 recites

the exact opposite, by having the cut punch provided on the movable die and the reservoir formed as a recess in the fixed die.

Claim 6 also recites an undercut portion provided at a periphery of the distal end of the cut punch to hold the resin solidified portion formed in the resin reservoir at the time of mold opening.

Applicant submits that Miyairi does not disclose the above feature. For example, there is no undercut portion formed at a periphery of the distal end of compression core 6 for holding solidified resin (i.e. Fig. 1).

Accordingly, since Miyairi fails to teach or suggest the features recited above, Applicant submits that claim 6 is patentable over the cited reference.

2. Claim 8

Since claim 8 is dependent upon claim 6, Applicants submit that such claim is patentable at least by virtue of its dependency.

3. Claim 15

Since claim 15 contains features which are similar to the features recited in claim 6, Applicant submits that claim 15 is patentable over Miyairi for at least similar reasons. For example, claim 15 recites that an undercut portion is provided at a periphery of the distal end of

the cut punch to hold the resin solidified portion formed in the resin reservoir at the time of mold opening.

Applicant submits that Miyairi does not teach or disclose the above feature. For example, there is no undercut portion formed at a periphery of the distal end of compression core 6 for holding solidified resin (i.e. Fig. 1).

Accordingly, Applicant submits that claim 15 is patentable over the cited reference.

B. The Examiner has rejected claims 6 and 8 as being anticipated by JP Publication No. 02-198816 to Suekichi ("Suekichi").

1. Claim 6

Applicant submits that claim 6 is patentable over the cited reference. For example, claim 6 recites that a resin reservoir is formed by recessing a fixed die toward a gate, where the cut punch can be inserted into the resin reservoir.

Similar to the previous Office Action of October 2, 2002, the Examiner appears to maintain that disc gate 2 (Figs. 1-3) of Suekichi anticipates the claimed resin reservoir. However, even assuming *arguendo* that disc gate 2 of Suekichi corresponds to the claimed resin reservoir, gate 2 still does not meet the recitations of claim 6. As shown in Figures 1-3 of Suekichi, the disc gate 2 appears to be part of or in line with cavity 3, rather than a separate cavity. Disc gate 2 appears to remain part of cavity 3 until punch 4 is advanced to separate the two areas. Also, gate 2 does not appear to be recessed into the fixed die.

In addition, claim 6 recites an undercut portion provided at a periphery of the distal end of the cut punch to hold the resin solidified portion formed in the resin reservoir at the time of mold opening.

Applicant submits that Suekichi fails to teach or disclose such a feature. For example, no undercut portion is provided at a periphery of the distal end of cut punch 4.

Accordingly, since Suekichi fails to teach or disclose the features recited above, Applicant submits that claim 6 is patentable over the cited reference.

2. Claim 8

Since claim 8 is dependent upon claim 6, Applicant submits that such claim is patentable at least by virtue of its dependency.

C. The Examiner has rejected claims 15-18 as being anticipated by U.S. Patent 5,472,334 to Takahashi ("Takahashi").

1. Claim 15

Applicant submits that claim 15 is patentable over the cited reference. For example, claim 15 recites that an undercut portion is provided to a periphery of the distal end of a cut punch. The undercut portion serves to hold a resin solidified portion formed in a resin reservoir at the time of mold opening.

As shown in Figs. 3A-3C of Takahashi, there is no undercut portion formed on a periphery of a distal end of cut punch 54. Rather, assuming *arguendo* that the portion above ejector pin 55 comprises an undercut portion, such portion is formed in the middle of cut punch 54, and is formed to allow ejector pin 55 to move in an axial direction with respect to cut punch 54 (col. 7, lines 34-38).

Accordingly, Applicant submits that Takahashi fails to teach or disclose each and every feature of claim 15, and respectfully requests the Examiner to withdraw the rejection.

2. Claim 16

Applicant has canceled claim 16, without prejudice or disclaimer. Therefore, the rejection of such claim is now moot.

3. Claim 17

Since claim 17 is dependent upon claim 15, Applicant submits that claim 17 is patentable at least by virtue of its dependency.

4. Claim 18

Since claim 18 contains features which are analogous to the features recited in claim 15, Applicant submits that claim 18 is patentable over the cited reference for at least analogous reasons as presented above.

Rejections under 35 U.S.C. § 103(a)

A. The Examiner has rejected claims 1-3, 5, 13 and 14 as being unpatentable over Miyairi in view of U.S. Patent to Kadoriku et al. ("Kadoriku"), JP Publication No. 02-067115A to Ikuo ("Ikuo") and JP Publication No. 09-262880 to Kunio ("Kunio").

1. Claim 1

Applicant submits that claim 1 is patentable over the cited reference. For example, claim 1 recites that molten resin still present in the resin reservoir is pushed back into the gate by the cut punch, at a time when the resin material in direct contact with the dies is gradually solidified.

The Examiner acknowledges that Miyairi, Ikuo and Kunio fail to suggest such a feature, but contends that Kadoriku does. However, Applicant believes the Examiner is misinterpreting and/or misapplying the cited reference. For example, in Kadoriku, when the resin material filled in cavity 5 is gradually cooled down by dies 2 and 4, cut punch 8 is lifted to separate sprue portion B1 from the disks B formed in cavity 5 (Fig. 2A). When dies 2 and 4 are open, molded products of sprue B1 and disks B are removed (Figs. 2B and 2C).

Applicant submits that Kadoriku fails to teach or disclose that the movement of cut punch 8 pushes still molten resin back into a gate portion (between interior space 25a and sprue region 5a of Fig. 1) since sprue B1 appears to retain its shape and size during movement of cut punch 8. Further, since cut punch 8 is shown as contacting sprue B1 at an outer periphery, Applicant submits that cut punch 8 fails to push still molten resin back into a gate portion.

Claim 1 further recites that an undercut portion provided at a periphery of a distal end of the cut punch retains a resin solidified portion in the resin reservoir. Applicant submits that the cited references fail to teach or disclose such a feature.

Accordingly, Applicant submits that claim 1 is patentable over the combination of the cited references, and respectfully requests the Examiner to withdraw the reference.

2. Claims 2, 3 and 5

Since claims 2, 3 and 5 are dependent upon claim 1, Applicant submits that such claims are patentable at least by virtue of their dependency.

In addition, although the Examiner refers to claim "7" on page 5 of the Office Action, Applicant assumes that the Examiner intended to reject claim "2" in view of Ikuo, rather than claim 7.

3. Claim 13

Since claim 13 contains features which are analogous to the features recited in claim 1, Applicant submits that claim 13 is patentable over the cited reference for at least analogous reasons as presented above.

4. Claim 14

Since claim 14 is dependent upon claim 13, Applicant submits that such claim is patentable at least by virtue of its dependency.

B. The Examiner has rejected claim 4 as being unpatentable over Miyairi in view of Kadoriku, Ikuo, Kunio and EP 0620097 to Ohno et al. ("Ohno"). However, since claim 4 is indirectly dependent upon claim 1, and Ohno fails to cure the deficient teachings of Miyairi, Kadoriku, Ikuo and Kunio, Applicant submits that such claim is patentable at least by virtue of its dependency.

C. The Examiner has rejected claims 7 and 9-11 as being unpatentable over Miyairi, Ikuo and Kunio.

1. Claims 7, 9 and 10

Since claims 7, 9 and 10 are dependent, either directly or indirectly, upon claim 6, Applicant submits that such claims are patentable at least by virtue of their dependency.

2. Claim 11

Applicant submits that claim 11 is patentable over the cited references. For example, claim 11 recites that a depth of the resin reservoir is 1.5 to 10 times an opening distance of the communication portion.

The Examiner maintains that the change in depth is merely a change in shape and size, and is therefore obvious. However, on pages 37 and 38 of the present Application, varying ratios of the depth of the resin reservoir to the opening distance of the communication portion, are shown from 1.2 to 10. As shown in table 5, and disclosed on page 38, the claimed ratio range provides a wider range of driving times and a more stable production. Accordingly, the features disclosed in claim 11 are not merely a change in shape or size, as contended by the Examiner.

Since neither Miyairi, Ikuo or Kunio disclose such a feature, Applicant submits that claim 11 is patentable over the cited references. Accordingly, Applicant has rewritten claim 11 into independent form.

D. The Examiner has rejected claims 1-3, 5, 13 and 14 as being unpatentable over Suekichi in view of Kadoriku, Ikuo and Kunio.

1. Claim 1

Applicant submits that claim 1 is patentable over the cited references. For example, claim 1 recites that molten resin still present in the resin reservoir is pushed back into the gate by the cut punch, at a time when the resin material in direct contact with the dies is gradually solidified.

The Examiner acknowledges that Suekichi, Ikuo and Kunio fail to suggest such a feature, but contends that Kadoriku does. However, similar to Applicant's statements above concerning the rejection of claim 1 in view of Miyairi and Kadoriku, Applicant believes the Examiner is misinterpreting and/or misapplying the Kadoriku reference. In particular, when the resin material filled in cavity 5 of Kadoriku is gradually cooled down by dies 2 and 4, cut punch 8 is lifted to separate sprue portion B1 from the disks B formed in cavity 5 (Fig. 2A). When dies 2 and 4 are open, molded products of sprue B1 and disks B are removed (Figs. 2B and 2C).

Applicant submits that Kadoriku fails to teach or disclose that the movement of cut punch 8 pushes <u>still molten</u> resin back into a gate portion (between interior space 25a and sprue region 5a of Fig. 1) since sprue B1 appears to retain its shape and size during movement of cut punch 8. Further, since cut punch 8 is shown as contacting sprue B1 at an outer periphery, Applicant submits that cut punch 8 fails to push still molten resin back into a gate portion.

Claim 1 further recites that an undercut portion provided at a periphery of a distal end of the cut punch retains a resin solidified portion in the resin reservoir. Applicant submits that the cited references fail to teach or disclose such a feature.

Accordingly, Applicant submits that claim 1 is patentable over the combination of the cited references, and respectfully requests the Examiner to withdraw the reference.

2. Claims 2, 3 and 5

Since claims 2, 3 and 5 are dependent upon claim 1, Applicant submits that such claims are patentable at least by virtue of their dependency.

In addition, although the Examiner refers to claim "7" on page 8 of the Office Action, Applicant assumes that the Examiner intended to reject claim "2" in view of Ikuo, rather than claim 7.

3. Claim 13

Since claim 13 contains features which are analogous to the features recited in claim 1, Applicant submits that claim 13 is patentable over the cited reference for at least analogous reasons as presented above.

4. Claim 14

Since claim 14 is dependent upon claim 13, Applicant submits that such claim is patentable at least by virtue of its dependency.

E. The Examiner has rejected claim 4 as being unpatentable over Suekichi in view of Kadoriku, Ikuo, Kunio and Ohno. However, since claim 4 is indirectly dependent upon claim 1, and Ohno fails to cure the deficient teachings of Suekichi, Kadoriku, Ikuo and Kunio, Applicant submits that such claim is patentable at least by virtue of its dependency.

F. The Examiner has rejected claims 7 and 9-11 as being unpatentable over Suekichi in view of Ikuo and Kunio.

1. Claims 7, 9 and 10

Since claims 7, 9 and 10 are dependent, either directly or indirectly, on claim 6, Applicant submits that such claims are patentable at least by virtue of their dependency.

2. Claim 11

For similar reasons as presented above under the rejection of claim 11 in view of the Miyairi reference, Applicant submits that claim 11 is patentable over the combination of Suekichi, Ikuo and Kunio. Therefore, claim 11 has been rewritten into independent form.

G. The Examiner has rejected claim 12 as being unpatentable over Miyairi in view of Takahashi. However, since claim 12 has been canceled, without prejudice or disclaimer, the rejection of such claim is now moot.

H. The Examiner has rejected claim 12 as being unpatentable over Suekichi in view of Takahashi. However, since claim 12 has been canceled, without prejudice or disclaimer, the rejection of such claim is now moot.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

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